

REPLY UNDER 37 CFR 1.116 – EXPEDITED PROCEDURE TECHNOLOGY  
CENTER 1794

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Art Unit	: 1794	<b>Customer No. 035811</b>
Examiner	: Monique R. Jackson	
Serial No.	: 10/591,749	Docket No.: SPL-06-1222
Filed	: September 6, 2006	
Inventors	: Masafumi Hashimoto	Confirmation No.: 3421
	: Takeshi Uekido	
	: Toshiyuki Nishino	
	: Toshihiko Anno	
Title	: ADHESION-ENHANCED	
	: POLYIMIDE FILM, PROCESS	
	: FOR ITS PRODUCTION, AND	
	: LAMINATED BODY	

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Dated: October 21, 2009

**RESPONSE**

**Mail Stop AF**  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

This is submitted in response to the Official Action dated August 24, 2009.

Claims 23, 25, 27-31 and 33 stand rejected under 35 USC §103 over Ishikawa. The Applicants note with appreciation the Examiner's detailed comments hypothetically applying Ishikawa against those claims. The Applicants respectfully submit, however, that Ishikawa fails to render those claims obvious. Reasons are set forth below.

The rejection frankly acknowledges that Ishikawa does not disclose the Applicants' claimed thickness of the coating layer. The Applicants agree. However, the Applicants do not agree that the difference in the thickness of the coating layer is "slight" as set forth in the rejection. The Applicants recite a very narrow range of thickness relative to Ishikawa, the Applicants' thickness range being 0.5 to 1  $\mu\text{m}$ . On the other hand, Ishikawa recites a range of 2 to 50  $\mu\text{m}$ . There is no overlap between those two thicknesses and the Applicants do not believe

that the difference is “slight.” There is a 1  $\mu\text{m}$  difference between the 2  $\mu\text{m}$  low-end point of Ishikawa and the Applicants’ upper range. In other words, the difference in thickness is twice the actual range of the Applicants’ thickness and is 100% larger than the Applicants’ maximum thickness. The Applicants therefore respectfully submit that a thickness that is at least twice as thick as the Applicants’ maximum thickness and four times thicker than the Applicants’ lowest thickness is anything but a “slight” difference. This is a major difference.

Moreover, there is no disclosure, there is no teaching and there is no suggestion in Ishikawa to still further lower the thickness beyond the disclosed range. Thus, one skilled in the art simply would not be motivated to vary the thickness beyond the very large range that already exists. Thus, the Applicants respectfully submit that Claims 23-25, 27-31 and 33 are not obvious over Ishikawa for this reason alone.

However, there are additional differences. In that regard, the Applicants invite the Examiner’s attention to column 2 beginning at line 16 which provides a concise description of the Ishikawa disclosure with respect to the coating. The coating is an organic solvent solution of a polyimidosiloxane composition comprising a mixture of an epoxy resin and an amorphous polyimidosiloxane produced from an aromatic tetracarboxylic acid or a dianhydride or ester thereof, a diaminopolysiloxane and an aromatic diamine. In other words, the coating contains three discrete components, namely 1) a diaminopolysiloxane, 2) an aromatic diamine and 3) an aromatic tetracarboxylic dianhydride. Those three components produce the polyimidosiloxane composition.

This is sharply contrasted to the Applicants’ subject matter as recited in Claims 23-25, 27-31 and 33. Specifically, referring to Claim 23, the Applicants claim a polyamide precursor which yields a highly heat-resistant amorphous polyimide (B) obtained from an aromatic

tetracarboxylic dianhydride and an aromatic diamine. Each of the tetracarboxylic dianhydride and the aromatic diamine are specified as being one of two components for each of the dianhydride and the diamine. In other words, the Applicants' Claim 23 recites a two-component composition resulting in the amorphous polyimide (B).

The Applicants therefore respectfully submit that if one skilled in the art were to look to Ishikawa, one skilled in the art would employ the Ishikawa three-component system which contains the additional component of the diaminopolysiloxane beyond the Applicants' claimed aromatic tetracarboxylic dianhydride and aromatic diamine as the two components. Inasmuch as the Applicants claim a two-component system with respect to the amorphous polyimide (B) and not the three-component system taught by Ishikawa, the Applicants respectfully submit that Ishikawa would actually lead one skilled in the art away from the Applicants' claimed subject matter as recited in Claim 23. As a consequence, the Applicants respectfully submit that Claims 23-25, 27-31 and 33 are patentable over Ishikawa. Withdrawal of the rejection is respectfully requested.

Claims 26 and 32 stand rejected under 35 USC §103 over the hypothetical combination of EP '075 with Ishikawa. The Applicants again note with appreciation the Examiner's detailed comments hypothetically applying the combination against Claims 26 and 32. The Applicants respectfully submit, however, that even if one skilled in the art were to make the hypothetical combination, the result of that combination would still be a coating layer formed from the three-component Ishikawa polyimidosiloxane which is different from the Applicants' two-component system not including the diaminopolyimidosiloxane. Withdrawal of the rejection is also respectfully requested.

In light of the foregoing, the Applicants respectfully submit that the entire Application is now in condition for allowance, which is respectfully requested.

Respectfully submitted,



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